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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/122,576 07/24/98 SIEV

D CVS-1

GERARD H. BENCEN  
426 ANDERSON COURT  
ORLANDO FL 32801

HM12/0827

EXAMINER

| ART UNIT | PAPER NUMBER |
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1618

DATE MAILED:

08/27/99

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|                              |                                      |                                    |
|------------------------------|--------------------------------------|------------------------------------|
| <b>Office Action Summary</b> | Application No.<br><b>09/122,576</b> | Applicant(s)<br><b>Siev et al.</b> |
|                              | Examiner<br><b>McCarthy, T.C.</b>    | Group Art Unit<br><b>1618</b>      |

Responsive to communication(s) filed on Jul 24, 1998

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire one month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-116 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) \_\_\_\_\_ is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims 1-116 are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

  
KEITH D. MACMILLAN  
PRIMARY EXAMINER

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1 and 106, drawn to a method for producing a resin, classified in class 436, subclass 85.
  - II. Claims 32, and 55, drawn to a method for producing a resin, classified in class 436, subclass 85.
  - III. Claim 38, drawn to a method for producing a resin, classified in class 436, subclass 85.
  - IV. Claims 56-58 and 63, drawn to a method for producing a resin, classified in class 436, subclass 85.
  - V. Claim 79, and 105drawn to a method for producing a resin, classified in class 436, subclass 85.
  - VI. Claim 85, drawn to a method for producing a resin, classified in class 436, subclass 85.
  - VII. Claim 86, drawn to a method for producing a resin, classified in class 436, subclass 85.

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VIII. Claim 87-88, drawn to a method for producing a resin, classified in class 436, subclass 85.

IX. Claim 111, drawn to a method for producing a resin, classified in class 436, subclass 85.

X. Claim 116, drawn to a method for producing an esterified resin, classified in class 436, subclass 85.

XI. Claims 6-12, and 30-31, drawn to a method for producing an intermediate compound, classified in class 436, subclass 85.

XII. Claims 13-14, drawn to a method for producing an intermediate compound, classified in class 436, subclass 85.

XIII. Claim 37 and 54, drawn to a method for producing an intermediate, classified in class 436, subclass 85.

XIV. Claim 84, drawn to a method for producing an intermediate, classified in class 436, subclass 85.

XV. Claims 2-5, 33-36, 59-62, 80-83, 107-110, and 112-115 drawn to a method for synthesizing a compound, classified in class 436, subclass 518.

XVI. Claims 15-27, 39-51, 64-76, and 89-101, drawn to a method for synthesizing a compound, classified in class 436, subclass 518.

XVII. Claim 29, 53, 78, and 103 drawn to methods for preparing a library of compounds, classified in class 436, subclass 518.

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XVIII. Claim 28, 33, 77, and 102 drawn to methods of purification, classified in class 436, subclass 518.

2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I-X all use different synthetic pathways that involve different reagents and different intermediates. These different reagents/intermediates each have different compositions, structures, and modes of operation, and therefore presumably require different conditions for reaction. In some cases the products have different structures and modes of operation (i.e. group IX is drawn to an esterified resin). Therefore, the processes claimed by inventions I-IX are patentably distinct, each one from the others.
4. Inventions XI-XIV all use different synthetic pathways that involve different reagents and result in the production of different intermediates compounds. The different reagents have different compositions, structures, and modes of operation, and the products produced each have different structures, compositions and modes of operation. Therefore, the processes claimed by inventions I-IX are patentably distinct, each one from the others.
5. The processes of inventions XV-XVI each result in different products (i.e. group XV results in a free compound, group XVI results in a solid-support bound compound) and therefore require different steps to practice. The inventions are therefore patentably distinct.
6. Inventions I-X and XI-XIV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the

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intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the case of inventions XI-XIII, the intermediate product is deemed to be useful as an intermediate in any reaction wherein a nucleophile attacks the terminal C and displaced the leaving group (i.e. the alpha amine group of an amino acid could be bound to any of the intermediates) and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. In the case of invention XIV, the intermediate product is deemed to be useful as an intermediate in any reaction requiring either a nucleophile or an electrophile (depending on the identity of R10) and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. Inventions 1-X are drawn to resins whereas inventions XV-XVII are drawn to methods of synthesizing a compound or multiple compounds. Therefore the steps required to practice the two inventions are different and the products are different. Furthermore, the synthesis methods outlined by inventions XV-XVII can be practiced using any functionalized resin, and the resins

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of inventions I-X can be used to practice purification processes (see below). Therefore, the inventions are patentably distinct, each one from the others.

8. Inventions 1-X are drawn to resins whereas invention XVIII is drawn to methods of purification. The steps used to practice inventions I-X and XVIII are different and are practiced to achieve different results. Furthermore, the products of inventions I-X can be used to practice several processes (i.e. SPS - see above). Therefore, the inventions are patentably distinct, each one from the others.

9. Inventions XI-XIV are used to produce intermediate compounds whereas inventions XV-XVII are practiced to synthesize peptides, etc. Therefore, the steps used to practice inventions XI-XIV and the products of inventions XI-XIV are different from inventions XV-XVII, and the inventions are patentably distinct, each one from the others.

10. Inventions XI-XIV are used to produce intermediate compounds whereas invention XVII is practiced to purify compound mixtures. Therefore, the steps used to practice inventions XI-XIV and the intended results are different from those of invention XVIII, and the inventions are patentably distinct, each one from the others.

11. The steps and products of invention XV-XVI are different from the steps and products of invention XVII (i.e. a library is, by definition, 2 or more and is therefore separate and patentably distinct from a single compound). Therefore, the inventions are separate and patentably distinct, each one from the others.

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12. The steps and intended results of inventions XV-XVII are different from the steps and intended results of invention XVIII. Therefore, the inventions are separate and patentably distinct, each one from the others.

13. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. However, some of the above distinct inventions fall within the same class and subclass. In these cases, restriction is also proper because of the reasons listed above, and because these inventions have acquired a separate status in the art due to their recognized divergent subject matter. For example, because such a wide range of compounds are used in the formation of each of inventions I-X, a search for one will not cover any one of the other eight inventions.

14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner T.C. McCarthy whose telephone number is (703) 308-5316. The examiner can normally be reached on Monday to Friday from 8:00 am to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald E. Adams, can be reached on (703) 308-0570. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

August 22, 1999

T.C. McCarthy III, Ph.D.